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Development of sanitary engineering. Industrial waste disposal. 311.

supply purification, Columbus, 1333. Water supply Ohio. Gallogly, Alexander V. Hydrostatic uplift in pervious soils.

1983. Gelineau, Victor Inlets on sandy coasts. 2338.

Gerig, William

Delaware River improvement. 1537. Mississippi River flood control. 1265. Flood control on the River Po. 2569.

Gibbs, George 'The Virginian Railway Electrification."

Giesting, Frank Alexander Memoir of, 2231.

Gilboy, Glennon
"The Compressibility of Sand-Mica Mix-

tures." 555. s. R. T. Design and construction of concrete pave-ments. 917.

Gladfelter, H. S. Mississippi River flood control. 903.

Godfrey, Edward Crown stresses in a skew arch. 1640. Crown stresses in a skew arch.

Notes on arched gravity dams. 260.

Proposed formula for columns. 2733.

Goethals, George Washington Memoir of. 2223.

Going, Alvah Seymour
Memoir of. 2421.

Goldsmith, William Snow remova. N. Y. 353. removal methods in New York, Jonnes H. R.

Goodell, John Milton anana lo maniquisses! Memoir of. 391.

Goodrich, E. P. The science of foundations. 377. Traffic control in New York, N. Y. 1222.

Goodrich, R. D. Flood control on the River Po. 2571.

Gould, Richard H.
"Comments on the Design of Digestion Tanks." 2655. Design of Sludge

Gow, Charles R.
Hydrostatic uplift in pervious soils. 1972.

The science of foundations, 375.

Gray, Harold F.
Tides and their engineering aspects. 211.

Greeley, Samuel A.
"The Sewage Disposal Works of Decatur,
Illinois." 2237.

Green, Hubert Edward Memoir, of, 678.

Green, Roy M. Arch dam investigation. 2607.

Greenburg, Leonard
Development of sanitary engineering. 612.

Gregory, John H. "The O'Shaughnessy Dam and Reservoir." 405.

Gregory, William B. Flood control on the River Po. 2136.

Grove, William G. Florianopolis Bridge. 1133.

Gruenberger, 0. New theory for the centrifugal pump. 324.

Grunsky, C. E.
Flood control on the River Po. 2575.
Flood protection data. 1662.
Report of the Committee of the Irrigation Division on A National Reclamation Policy. 2097.

H. M. nuous beams over three spans. Hadley, H. M Continuous 2559.

H. A. ngo hydro-electric development. Conowingo 667.

Hall. C. L. Progress in waterways engineering. 643. Surveying and mapping in the United States. 342.

William M. Mississippi River flood control. 1855.

Halmos, Eugene E. Hydrostatic uplift in pervious soils.

Halsey, W. H. Boundary surveys. 648.

Hammatt, Edward Augustus White Memoir of. 382.

Hammond, A. J.
Flood protection data. 1665.

Hanna, F. W. dam analysis by trial load method. Arch 1598. Notes on arched gravity dams. 232. Upward pressures under dams. 1958.

Hare, S. Herbert
The planning of Longview, Wash. 816.

Harris, Elmo G. ew theory for the centrifugal pump.

Harris, F. R. Emergency dam on New Orleans Canal. 673. Hydrostatic uplift in pervious soils. 1971.

Hart, R. A. Development of sanitary engineering. 307. Bannold .

Hatfield, William D.
"The Sewage Disposal Works of Decatur,
Illinois." 2237. Hoover, Charles P.

Hatton, T. Chalkley Qualifications of contractors. 2014.

Hawgood, H.

Report of Committee of Engineering Foundation on Arch Dam Investigation. May, Pt. 3.

Hawley, John B. Silting of lake at Austin, Texas. 1650. Hawthorn, G. E.

concrete pavements. Construction of 1617.

Haydock, Winters
Cultural opportunities in regional planning. 601.

Hazen, Allen Hydrostatic uplift in pervious soils.

Hedke, Charles R. Evaluation of water rights. 2169.

Henny, D. C. Report of Committee of Engineering Foundation on Arch Dam Investigation. May, Some phases of irrigation financing. 267.

Herschel, Clemens
Precise weir measurements. 2501.

Herschel, Winslow H.
Foundations and drainage of highways.

Heyworth, James Ormerod Manual A. Memoir of. 2422.

Hickerson, T. F.
"A Proposed Formula for Columns." 1435.

Hidinger, L. L. Development of sanitary engineering. 307.

E. R. he Virginian Railway electrification. Hill, E 1304.

Concrete dam construction. 827.

Hinderlider, M. C.

Administrative water problems. 2177.

Report of the Committee of the Irrigation Division on A National Reclamation Policy. 2097. Hinds, Julian Report of Committee of Engineering Foundation on Arch Dam Investigation. May, "Upward Pressures Under Dams: Experi-ments by the United States Bureau of Reclamation." 685. Hinkle, A. H.
"The Engineer's Part in Making the Highway Safe," 2089. Hodgson, C. V. Surveys on the New Jersey Coast. 345. Hogas, John P.
Flood control on the River Po. 2135.
The Virginian Railway electrification. Harris, Elmo G. Hogg, T. H. Re-design of Catawba Station. 372. Holmes, J. Albert Hydrostatic uplift in pervious soils. 2707.

The science of foundations. 871. Hooper, Elmer G.

Design and construction of concrete pavements. 919. ew theory for the centrifugal pump. 621. Hoover, C. B. "The O'Shaughnessy Dam and Reservoir." 405. Hoover, Charles P.
"The Treatment of the Water Supply of the City of Columbus, Onto." 471. Hosmer, George L.

"Horizontal Control in Surveying." Preliminary Report of the Surveying and
Mapping Division on Horizontal Control. Hosmer, Guy Frederic Maria la gardia Memoir of. 1364. Hawthorn, G. E. Houk, Ivan E. dam analysis by trial load method. Arch 2317. "Tests on Models at Boulder, Colorado." May, Pt. 3, 215. Upward pressures under dams, 2345. Housel, W. S.
The science of foundations. 1248. Howell, C. H. "Analysis of Arch Dams by the Trial Load Method." 61. Upward pressures under dams. 2351. Hubbard, Frank James And Andread Memoir of. 2628. Huber, Walter L. Formulas for stresses in circular arches. 336 Water-power appraisals, 325. Administration of Stream Flow." 1085. Hyde, A. Lincoln Continuous beams over three spans. 1962. Ihlder, John Cultural opportunities in regional plan-ning. 824. ning. 824. Housing and the regional plan. 821. Evaluation of water rights. 2157.0 Jakobsen, B. F.
Arch dam analysis by trial load method.

1311.

Crown stresses in a skew arch. 1639. General versus segregated contracts. 1322. Load distribution in high arch dams. 2153.

Notes on arched gravity dams of 1479 Results of Miami flood control system. 2415. O'Shaughnessy Dam and Reservoir. 1327. Trans-mountain water diversions. 2 Upward pressures under dams. 1653. Japiot, Marcel Virginian Railway electrification. 1296. Jaquith, A. C.
"Analysis of Arch Dams by the Trial Load
Method." 61. odirey, Edward Mississippi River flood control. 881. Jenks, Harry N. Filtering material for sewage works. 2214. Johnston, Clarence T. Boundary surveys. 1546. Jonah, F. G. Goldsmith, William Mississippi River flood control: 200. Jones, E. R. Development of sanitary engineering. 611. Jones, Fred Atwood Goodrich, E. P. Memoir of. 2773. Jorgensen, Lars R. Formulas for stresses in circular arches. Joslin, H. V. Pering and Joseph Joseph Re-design of Catawba Station 371, 1990 Junkersfeld, P.
The civil engineer and power development. 923. mi 'nellign Mydrostatic Justin, Joel D. The civil engineer and power development. Water-power appraisals. 625, mail , want Kennedy, James Henry Memoir of. 2026. Greeley, Samuel A. King, H. W.
Precise weir measurements. 279. Joseph A. Methods on pre-casting concrete segments. Green, Roy M. Klyce, Battle Hargrove Memoir of. 2774. bunos Jandan Greenburg, Leonard Knowles, Morris Development of sanitary engineering, 305.

Mississippi River flood control. 190.

Qualifications of contractors. 2011.

Results of Miami flood control system. The regional community of the future. 291. Grove, William G. Kramer, E. W. Notes on arched gravity dams. 242. Kramer, Hans "The Isthmian Canal Situation." 1693. Krynine, D. P.
Compressibility of sand-mica mixtures.
2543. Construction of concrete payements, 1913. Foundations and drainage of highways. 1912 The science of foundations. 2505. Kuelling, H. J.

Kuelling, H. J.

Comparisons of Road Surfaces—Wisconsin." 2482. Lally, John Michael Memoir of, 680. Lance, J. H. Water-power appraisals. 1521. Lane, E. W. Hydrostatic uplift in pervious soils, 2708. Mississippi River flood control, 2697.

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Macher Floyd A.

Lavis, Fred Metropolitan district suburban transit. 2595. Parder, W. S.

Lawson, L. M. Silting of lake at Austin, Texas, 1345.

Lawson, T. R.
Hydrostatic uplift in pervious soils. 1979.

Leavitt, Charles Wellford Memoir of. 2228.

Memoir of. 2228.

Leckliter, Walter Harlan
Memoir of. 2233.

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18.

Lee, Charles H. Flood discharge in San Joaquin Valley. 1235. Tides and their engineering aspects. 211.

Lee, John C. H. Surveying and mapping in the United States. 845. Pendleton, T. P.

Le Prince, J. A.
Development of sanitary engineering. 1506.

Levy, Alfred Memoir of. 2635.

Lewis, Harold M. Basic information needed for regional plan. 1165.

Metropolitan district suburban transit. Street designing for various uses. 2611.

Lewis, M. R. Drainage of irrigated lands. 2203.

Liddicoat, R. T. New theory for the centrifugal pump. 1511.

Powell, Willbant Jonney Metropolitan district suburban transit. 2597.

2597. Lindley, Edward S. Head-works of the Imperial Canal. 2103. Side spillways for diversion canals. 641.

Lindquist, Erik G. W. Precise weir measurements. 1786.

Lippincott, J. B.
Report of the Committee of the Irrigation Division on A National Reclamation Policy. 2097.

Litchfield, Norman The Virginian Railway electrification.

General versus segregated contracts. 1321. Street designing for various uses. 2617.

MacGregor, R. A.
Snow removal methods in New York, N. Y.
354.

McConnell, I. W.
"The Role of the Civil Engineer in Power
Development." 155. 155.

McCrory, S. H.
Development of sanitary engineering.
1505.

McCurrach, D. F. Water-power appraisals. 326.

McIntyre, Lewis W.

Traffic control by electric signals. 1217.

McLaurin, Banks Silting of lake at Austin, Texas. 2364.

McMilian, F. R.
Final Report of the Committee of the
Structural Division on Florida Hurricane. 1757.

McMinn, Thomas James Memoir of. 1360.d starfana mab APTA

McPike, Martin J. Hydrostatic uplift in pervious soils. 2377.

Rich, George R.

Maitland, Alexander, Jr. Memoir of. 383.

Maltby, Frank B.
Mississippi River flood control. 187. March, Harry J.

Basic information needed for regional plan. 599. Cultural opportunities in regional plan-ning. 603.

Marston, Frank A.
The science of foundations. 1838.

Martel, R. R. Effect of earth shocks on structures. 2603.

Marvin, Frank Olin Memoir of. 385.

Marx, Charles D. Report of Committee of Engineering Foundation on Arch Dam Investigation. May,

Mather, Stephen T. "Engineering Applied to National Parks."

Matthes, Gerard H. Flood protection data. 1657.

Mavis, F. Theodore
Design of flume and siphon transitions.
1195.

New theory for the centrifugal pump. 831. Stream flow in general terms. 1899.

Maxson, Frank Oscar Memoir of. 2029.

Meals, Casper D. Aerial tramways. 849.

Medici, Mario theory for the centrifugal pump. New 1177.

Mecker, R. I.
Administrative water problems. 2181.
Return water from irrigation. 2187.
Silting of lake at Austin, Texas. 2556.

Hydrostatic uplift in pervious soils. 1972.

Mensch, L. J.
Arch dam analysis by trial load method.

Meredith, Wynne
Report of Committee of Engineering Foundation on Arch Dam Investigation. May, Pt. 3.

Midolo, Mario John Memoir of. 2041.

Miller, John A., Jr.
Metropolitan district suburban transit.

Miller, Lee H.
Final Report of the Committee of the
Structural Division on Florida Hurri-

cane. 1757. Monniche, T. B. Emergency dam on New Orleans Canal.

Montgomery, Julian Silting of lake at Austin, Texas. 1946. Moran, Daniel E.

Hydrostatic uplift in pervious soils. 1982.

Morgan, Arthur E. Flood protection data. 1663.

Morris, Clyde T. Continuous beams over three spans. 1961. Final Report of the Committee of the Structural Division on Florida Hurri-

cane. 1757.
"The Design of Tall Building Frames to Resist Wind." 1395.

Moyer, S. L. Mississippi River flood control. 1843.

Mueller, Chester

Concrete Pavement Over Poor Sub-Grade at Port Newark, New Jersey."

Muhs, C. C. General versus segregated contracts. 1623.

ew theory for the centrifugal pump.

Murphy, D. W. "Drainage Recovery from Irrigation." 1103.

Nagle, James C. Memoir of. 2230.

Nagler, Floyd A.

Precise weir measurements, 283.
"The Effect of Agricultural Drainage Upon
Flood Run-Off." 165.

Freeks Olln

Nauman, George

Newell, Joseph S.
"The Design of Airplane Wing-Beams." 725. off brendit as

Newell, Thomas R.

Administrative water problems, 2577.

Niles, Alfred S.

Design of airplane wing-beams. 2127. Nimmo, W. H. R.

Design of flume and siphon transitions. on Frank dates

Noetzli, Fred A.

Arch dam analysis by trial load method. 2325.

"Arch Dams: An Experimental Investiga-tion." May, Pt. 3, 11. Concrete dam construction. 1509. Engineering features of a theatre building. 1580.

Formulas for stresses in circular arches.

1531. Report of Committee of Engineering Foundation on Arch Dam Investigation. May

Pt. 3.

O'Brien, Morrough P. Experiments on models of Pit River Dams. 1817.

Inlets on sandy coasts. 2329. New theory for the centrifugal pump. 1192. Stream flow in general terms. 1902.

Oesterblom,

"Continuous Beams Over Three Spans."

Ofverholm, I.

Virginian Railway electrification. 1300.

Older, Clifford

Design and Construction of Concrete Pavements." 147.

Monniche, T. E.

Minelesippi :Rivor

Onstott, Virgil Samms Memoir of. 2428. Memoir of.

O'Reilly, John Devereux Memoir of. 934.

Orrok, George A.

The civil engineer and power development. 925.

Osgood, William R. Proposed formula for columns. 2401.

O'Shaughnessy, M. M. Earthquakes and and engineering substructures. 2751. Report of Committee of Engineering Foun-

dation on Arch Dam Investigation. May.

Paaswell, George Aerial tramways.

847. The science of foundations. 655,2

Paimer, George Truman
Development of sanitary engineering. 1176.

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Pardoe, W. S.
Precise weir measurements. 1157.

Parshall, Raiph L. Evaluation of water rights. 2175. Experiments on models of Pit River Dams.

Precise weir measurements. 817.

Parsons, H. de B.

"Hydrostatic Uplift in Pervious Soils." 941 Upward pressures under dams. 2354.

Paul, Charles H.
Mississippi River flood control. 199. Payrow, Harry G.
Development of sanitary engineering. 1171.

Pearce, Cecil E. Stream flow in general terms. 1606.

Pendleton, T. P.

Surveying and mapping in the United States. 339. Perkins, Frank William

Memoir of. 388.

Phelps, H. E. Relation of road type to tire wear. 583. Pohl, Charles A. Flood-protection data. 2199.

Porter, H. Hobart

Report of Committee of Engineering Foundation on Arch Dam Investigation. May, Pt. 3.

Potter, W. B.
The Virginian Railway electrification. 1295.

Powell, William Jenner

Silting of lake at Austin, Texas. 2553. Price, W. G. Mississippi River flood control. 1253.

Prichard, Henry S.
Proposed formula for columns. 2721.

Priester, George C. Stiffness of suspension bridges. 2741.

Proctor, Ralph F.

Qualifications of contractors. 2005. Ramser, C. E.

Mississippi River flood control. 1869. Randall, R. H.

Boundary surveys. 647.
"Standard City Engineering Surveys."

Randell, Ralph R.
Probability of flood flows. 205.

Rathbun, J. Charles
"Crown Stresses in a Skew-Arch." 485.

Ray, George J.
The Virginian Railway electrification. 1309.

Rayner, R. H.
"Specifications for Transit Traversing and
Stadia Leveling." 2639.

Reed, Oren

Experiments on models of Pit River Dams. 867. Flood control on the River Po. 2002. Flood discharge in San Joaquin Valley.

Mississippi River flood control. 1256.

Silting of lake at Austin, Texas. 1347.

Reeder, William C. Street designing for various uses. 2616.

Rehbock, Th. Precise weir measurements, 1767.

Rich, George R.
Arch dam analysis by trial load method. upliff to very lous soil

1315.

Richards, William H., Jr.
Boundary surveys. 355.

Ridgway, Robert
General versus segregated contracts. 1922.

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hod.

Riggs, Morris John Memoir of. 2031. Robinson, A. W. The great Yangtze Bar. 327.

Robinson, H. F. Silting of lake at Austin, Texas. 1939.

The stiffness of suspension bridges. 2406.

Rohwer, Carl Design of flume and siphon transitions. 1209.

Root, H. O. Construction of concrete pavements. 1620. Rose, Albert C.

"Foundations and Drainage of Highways."

Rose, John Gansovertte Memoir of. 2429.

Rose, Rudolf Viedt Memoir of. 2424. Rosecrans, Merle William A. M. Annual Control Memoir of. 935.

Ross, Albert W., Jr.
"The Design of Tall Building Frames to
Resist Wind." 1395.

Proposed formula for columns. 2727.

Rubey, William W.
Compressibility of sand-mica mixtures. 1936.

Inlets on sandy coasts. 1339.
Tides and their engineering aspects. 807.

Rudolph, William E.
"Water Supply Problems of a Desert
Region." 2287.

Sabin, L. C.
Lake Washington Ship Canal, 273,

Salmon, E. H. Proposed formula for columns. 2726.

Sargent, A. W. Lake Washington Ship Canal. 585.

Sargent, J. A.

The civil engineer and power development. 1917.

Savage, John L. Arch dam analysis by trial load method. 2317.

Report of Committee of Engineering Foundation on Arch Dam Investigation. May,

"Test on Models at Boulder, Colorado." May, Pt. 3, 215. Wells, William Bacon

Sawyer, W. C. Street designing for various uses. 2614.

Scheidenheim, F. W. Experiments on models of Pit River Dams. 1231

The civil engineer and power development. 929. Tides and their engineering aspects. 209.

Schlesinger, G. F.
"The Practical Utility of Highway Transport Surveys." 2073.

Schlick, W. J.
Mississippi River flood control. 1565.

Schultz, Charles
Silting of lake at Austin, Texas. 1649. Schulz, Edward H. Mississippi River flood control. 894.

Scobey, Fred C. Evaluation of water rights. 2173.

Scofield, Glenn Mason Memoir of. 2033.

Semenza, Guido
The Virginian Railway electrification. 1302.

Shaw, Arthur M.
The science of foundations. 2313.

Sheets, Frank T.
"Qualifications of Contractors on Public Works." 1021.

Shepard, F. H.
The Virginian Railway electrification. 1303.

Sheridan, Howard Augustus
Memoir of. 681.

Sherman, Edward C. Experiments on models of Pit River Dams. 363.

Sherman, Le Roy K. Water-power appraisals. 837.

Shurtleff, Arthur A.
Imagination in city planning. 2148.
"Relation of the Landscape Architect to
the Allied Professions Engaged in City
Planning." 2667.

Silicox, L. K.
The Virginian Railway electrification. 1298.

Simham, R. D. N.
Compressibility of sand-mica mixtures. 1933. Imagination in city planning, 2409.
The science of foundations. 1834.
The Virginian Railway electrification. 1875.

Simpson, R. H. Highway transport surveys. 2755.

Slater, Willis A.
"Report of Tests on Stevenson Creek
Dam." May, Pt. 3, 49.

Slattery, John R.
Flood control on the River Po. 2137.

Sleight, Reuben Benjamin Memoir of. 1365. Smith, Alfred

Design of tall building frames to resist wind. 2394.

Smith, Augustus Inlets on sandy coasts. 2334.

Smith, Burton Report of the Committee of the Irrigation Division on A National Reclamation Policy. 2097.

Smith, G. E. P.

Report of the Committee of the Irrigation Division on A National Reclamation Policy. 2097.

Smith, Walter M.
Results of Miami flood control system. 2021.

iow, J. P. Mississippi River flood control. 185.

Snyder, Hunter Imboden Memoir of. 1677.

Spear, Walter E. Earthquakes and engineering substructures. 2749. pencer, John Clark Memoir of. 389.

Spooner, Ailen Newhall
Memoir of. 936.

Starrett, W. A. General versus segregated contracts. 1921. Steinman, D. B.

Florianopolis Bridge. '1133.

Steuermann, E. Stiffness of suspension bridges. 2737.

Sheets, Frank T.

Stevens, J. C.

Experiments on models of Pit River Dams. 2303.

eport of the Committee of the Irriga-tion Division on a National Reclamation Report Policy, 2097.
Sliting of lake at Austin, Texas. 1950.
Upward pressures under dams... 1957.

Stewart, Lucern S. Memoir of. 2777.

General versus segregated contracts. 1629.

Strachan, Robert C. Washington Halman Voil Aerial tramways, 11359p. A has well maintain

Precise weir measurements. 587.

Strickland, Kirby Lee Memoir of. 2034.

of vog all nets Stromquist, W. G.
Development of sanitary engineering. 1503.

Strong, A. M.
Inlets on sandy coasts. 1929.

Stuart, Francis Lee
"Modernizing the Suburban Transit of the
Metropolitan District." 1391.

Sutherland, R. A.
Arch dam investigation. 2609.
"Load Distribution in High Arch Dams." 1027

Switzer, F. G. vitzer, F. G. Flood protection data. 1660. Probability of flood flows. 803.

Talbot, Arthur N. Flood protection data. 1664.

Tailman, Paul Bertram Memoir of. 2425. Memoir of. Tate, Robert L'Hommedieu Memoir of. 1674.

Taylor, Harry
Delaware River improvement. 347.

Taylor, T. U. "Silting of the Lake at Austin, Texas."

Terzaghi, Charles Foundations and drainage of highways.

1909. Hydrostatic uplift in pervious soils. 1 Upward pressures under dams. 1953. Thomas, C. R., Jr. Highway transport surveys. 2762.

Thomson, T. Kennard General versus segregated contracts. 1631. Hydrostatic uplift in pervious soils. 1981. Mississippi River flood control. 1870.

Thorndike, Sturgis Hooper Memoir of. 2631.

Tibbetts, Fred H.
Evaluation of water rights. 2164.
Return water from irrigation. 2190.

Tiffany, R. K.
Report of the Committee of the Irrigation Division on A National Reclamation

Policy. 2097. State reclamation in Washington. 581.

Tillman, Frank Andrew Memoir of. 2432.

Tilison, George William
"Street Designing for Various Uses." 1725.

Timoshenko, S.

Advance in structural analysis. 2383.

New theory for the centrifugal pump.

Stiffnes of Suspension Bridges." 1464.

Torpen, B. E. Experiments on models of Pit River Dams. 857.

sidgmay, Robert Towl, Roy N. Development of sanitary engineering.

Townsend, C. McD.
Flood control on the River Po. 1997.

Tripp, Oscar Holmes Memoir of. 679.

B

Foundations and drainage of highways. 913.

Turner, C. A. P.
Arch dam analysis by trial load method. 1585. Notes on arched gravity dams. 261.

Turner, Daniel L.

Metropolitan district suburban transit. 2591.

Tuska, Gustave R. General versus segregated contracts. 1630.

Tyler, R. G. Silting of lake at Austin, Texas. 2367.

Van Duzer, W. A. Highway transport surveys. 2759.

Van Norman, H. A.
"The Proposed Los Angeles-Colorado River
Aqueduct." 1116.

Vaughn, R. L. The great Yangtze Bar. 637.

Veatch, N. T., Jr.
Development of sanitary engineering, 609.

Vogt, Fredrik Arch dam analysis by trial load method. 2515.

Wagner, Frank Memoir of. 1678. Waller, Laurence J.

Engineering features of a theatre building. 2123

Wailer, O. L.
Relation of road type to tire wear. 583.

Walter, R. F.
Silting of lake at Austin, Texas. 2545. Waring, F. H.

Water supply purification, Columbus, Ohio. 1329.

Warner, Edwin Hall Memoir of. 2036.

Warner, Frank C. Delaware River improvement. 349.

Way, W. F. Continuous beams over three spans. 2373.

Webster, George S.

Development of sanitary engineering, 303. Weir, M. W.

Imagination in city planning. 2412.

Wells, William Bacon Memoir of. 2779.

Welty, P. A. Silting of lake at Austin, Texas. 2359. Werner, P. Wilhelm

Upward pressures under dams. 2353.

essman, Harold E. Continuous beams over three spans. 1964.

Westergaard, H. M.
"One Hundred Fifty Years' Advance in
Structural Engineering." 993.
"Theoretical Analysis of the Structural
Action of the Stevenson Creek Arch
Dam." May, Pt. 3, 231.

Weston, Robert Spurr Water supply purification, Columbus, Ohio. Weymouth, F. E.
Report of Committee of Engineering Foundation on Arch Dam Investigation. May,
Pt. 3.

Wheeler, Bertrand Thorp Memoir of. 2038.

Wheeler, Levi Lockwood Memoir of. 1362.

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9.

in iral rch White, Byron E.
Mississippi River flood control. 905.

White, Lazarus
General versus segregated contracts. 1628.
Hydrostatic uplift in pervious soils. 1981.
The science of foundations. 1821.

Whitehead, R. H. Emergency dam on New Orleans Canal. 675.

Wilder, Robert M.
Continuous beams over three spans. 1969.

Wiley, A. J.
Notes on arched gravity dams. 254.

Williams, C. C.
The science of foundations. 657.
Williams, Gardner S.
Precise weir measurements. 1499.

Willis, Bailey
Earthquakes and engineering substructures. 2752.

Willis, R. H.
"Return Water, North Platte River Nebraska." 1098.

Wilson, Billings
Metropolitan district suburban transit.
2593.

Winter, I. A.
Experiments on models of Pit River Dams.
1558.

Wise, Russell S.
Traffic control in New York, N. Y. 1221.
Withington, Sidney
The Virginian Railway electrification.
1307.

Wood, Dana M. Water-power appraisals. 627.

Wood, Harry O.
Arch dam investigation. 2609.
Effect of earth shocks on structures. 2603

Woodard, Silas H.

Report of Committee of Engineering Foundation on Arch Dam Investigation. May, Pt. 3.

Woodward, Sherman M.
Mississippi River flood control. 1270.
"The Effect of Agricultural Drainage Upon
Flood Run-Off." 165.

Young, Samuel McC. Emergency dam on New Orleans Canal. 1285.